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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/601,138	06/20/2003	Floyd F. Markling	566.020	5944
27390	7590	06/29/2006	EXAMINER	
DOUGLAS L. TSCHIDA 633 LARPENTEUR AVE. WEST, SUITE B ST. PAUL, MN 55113			TRAN, HANH VAN	
			ART UNIT	PAPER NUMBER
			3637	

DATE MAILED: 06/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/601,138	MARKLING ET AL.	
	Examiner	Art Unit	
	Hanh V. Tran	3637	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3-12, 15-22, 24-30, 37 and 38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-12, 15-22, 24-30, 37-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/5/2006 has been entered.

Claim Objections

2. Claim 17 is objected to because of the following informalities: line 4, "to lock one said first and second" should be "to lock said first and second". Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 3-9, 11-12, 24-30, and 37-38 are rejected under 35 U.S.C. 102(b) as being anticipated by USP 5,401,347 to Shuert.

Shuert discloses a thermoforming plastic pallet comprising all the elements recited in the above listed claims including, such as shown in Figs 10-19, a first portion 30 having a generally flat outer surface and an inner surface including a continuous plane of a plurality of undulating ridges and valleys disposed from the outer surface; a

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second portion 32 having an outer surface including a plurality of depending feet 36 and intervening channels, and an inner surface including a continuous plane of a plurality of undulating ridges and valleys displaced from the outer surface; wherein the undulating ridges and valleys of the inner surface of the second portion are molded in complementary shaped surfaces to interdigitates with and conformally mates with the undulating ridges and valleys of the first portion without any spaces in the regions of interdigitation, the outer surface of the second portion includes a plurality of undulating ridges and valleys which ridges being defined as the feet and the valleys being defined as the spaced between adjacent feet, the inner surfaces of the first and second portions each comprise a series of undulations, the undulations of the inner surfaces of said first and second portions span one dimension of said first and second portions and wherein each undulation includes a series of ridges and grooves that conformally mate with a series of ridges and grooves of a complementary undulation at the other of said first and second portions, wherein the undulations at the inner surfaces of the first and second portions respectively define first and second wave fronts relative to a first axis and wherein undulations at each of said first and second wave fronts include a plurality of undulation ridges and valleys of third and fourth wave fronts that respectively bisect the first axis by defining a first direction of the wave fronts as a first axis and a second direction of the wave fronts as a second axis, with the second axis being orthogonal to the first axis.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shuert.

Shuert discloses all the elements as discussed above including the inner surface of the first portion being molded to the inner surface of the second portion. The different being that Shuert does not clearly disclose the plastic pallet is formed from puncture-resistant plastics. It is well known in the art to form a plastic article from a puncture-resistant plastic material for the purpose of preventing damage to said article during transporting from one location to another. Therefore, it would have been obvious to modify Shuert by having the plastic pallet being formed from puncture-resistant plastic for the purpose of preventing damage to said pallet during transporting from one location to another.

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8. Claims 15-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shuert in view of USP 6,112,672 to Heil.

Shuert discloses a thermoforming plastic pallet comprising all the elements recited in the above listed claims including, such as shown in Figs 10-19, a first portion 30 having a generally flat outer surface and an inner surface including a plurality of undulating ridges and valleys disposed from the outer surface; a second portion 32 having an outer surface including a plurality of depending feet 36 and intervening channels, and an inner surface including a plurality of undulating ridges and valleys displaced from the outer surface; wherein the undulating ridges and valleys of the inner surface of the second portion are molded in complementary interdigitation to the undulating ridges and valleys of the first portion, the outer surface of the second portion includes a plurality of undulating ridges and valleys which ridges being defined as the feet and the valleys being defined as the spaced between adjacent feet. The differences being that Shuert fails to disclose the pallet being a blow-molded pallet, instead of a thermoforming pallet.

Heil teaches that it is well known in the art to make members of a plastic pallet by blow-molded plastic in order to provide a process of manufacture that is predictable and reproducible, thereby decreasing variance and operating costs. Therefore, it would have been obvious and well within the level of one skill in the art to have the plastic pallet of Shuert being made of blow-molding process in order to provide a process of manufacture that is predictable and reproducible, thereby decreasing variance and

operating costs, as taught by Heil, since both teach alternate conventional plastic pallet structure, used for the same intended purpose, thereby providing structure as claimed.

Response to Arguments

9. Applicant's arguments filed 6/5/2006 have been fully considered but they are not persuasive. In response to applicant's argument on page 10 that Shuert "provides substantial hollow spaces", the examiner takes the position that the claimed language stated that the inner surface of the first and second portions conformally mates with each other without any spaces "in the regions of interdigitation"; therefore, Shuert still meets the claimed limitation since the inner surface of the first and second portions of Shuert does appears to conformally mates with each other without any spaces in the regions of interdigitation.

10. In response to applicant's statement on page 11 that the examiner objected to applicant's use of the term "wave-shaped", the examiner has not been able to find in any instances in the last Office action that the term "wave-shaped" was objected to by the examiner.

11. In response to applicant providing a dictionary definition for the term "wave-shaped", the examiner takes the position that although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993), each dictionary may have a different definition, and a wave may come in different sizes and shapes.

12. In response to applicant's argument on page 12 that no discussion is noted to the construction of Heil's interior surfaces, the test for obviousness is not whether the

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features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

13. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh V. Tran whose telephone number is (571) 272-6868. The examiner can normally be reached on Monday-Thursday, and alternate Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on (571) 272-6867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



HVT

June 26, 2006

Hanh V. Tran

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